

Avilla, IN 46710

United States Patent and Trademark Office

UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.uspto.gov

APPLICATION NO.	FILIN	G DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO
10/667,195	10/07/2003		Martin Kustermann	VOI0181.CIP	3263
7590 12/28/2004				EXAMINER	
Todd T. Taylor				LAMB, BRENDA A	
TAYLOR & AU	JST, P.C.				
142 S. Main St.			ART UNIT	PAPER NUMBER	
P.O. Box 560				1734	

DATE MAILED: 12/28/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

A	
ľ	

Office Action Summary	Application No.	Applicant(s) Group Art Unit 734				
-The MAILING DATE of this communication appears	on the cover sheet	beneath the correspondence address –				
Period for Reply	\neg					
A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO OF THIS COMMUNICATION.	EXPIRE	MONTH(S) FROM THE MAILING DATE				
 Extensions of time may be available under the provisions of 37 CFR 1. from the mailing date of this communication. If the period for reply specified above is less than thirty (30) days, a report of the period for reply specified above, such period shall, by default, Failure to reply within the set or extended period for reply will, by statuent of the provision of the	bly within the statutory rexpire SIX (6) MONTHS te, cause the application	minimum of thirty (30) days will be considered timely. If from the mailing date of this communication. In to become ABANDONED (35 U.S.C. § 133).				
M Responsive to communication(s) filed on	,					
This action is FINAL .						
Since this application is in condition for allowance except f accordance with the practice under Ex parte Quayle, 1935.	or formal matters, p C.D. 1 1; 453 O.G. 2	rosecution as to the merits is closed in 13.				
Disposition of Claims Claim(s)	· · · · · · · · · · · · · · · · · · ·	is/are pending in the application.				
Of the above claim(s)						
□ Claim(s)		is/are allowed.				
	is/are rejected.					
□ Claim(s)	is/are objected to.					
☐ Claim(s)						
Application Papers		requirement				
☐ The proposed drawing correction, filed on is ☐ approved ☐ disapproved.						
☐ The drawing(s) filed on is/are objecte	ed to by the Examine	er ·				
☐ The specification is objected to by the Examiner.						
☐ The oath or declaration is objected to by the Examiner.						
Priority under 35 U.S.C. § 119 (a)–(d) Acknowledgement is made of a claim for foreign priority un	der 35 U.S.C. § 119	(a)–(d).				
□ All □ Some* □ None of the:						
 □ Certified copies of the priority documents have been received. □ Certified copies of the priority documents have been received in Application No 						
		1 NO				
□ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a))						
*Certified copies not received:	•	. "				
Attachment(s)		•				
☐ Information Disclosure Statement(s), PTO-1449, Paper No(s	Interview Summary, PTO-413					
☐ Notice of Reference(s) Cited, PTO-892		Notice of Informal Patent Application, PTO-152				
☐ Notice of Draftsperson's Patent Drawing Review, PTO-948	Other					
Office Action Summary						

U.S. Patent and Trademark Office PTO-326 (Rev. 11/00)

Part of Paper No.

Application/Control Number: 10/667,195

Art Unit: 1734

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

Claims 1-32 and 39 are rejected under 35 U.S.C. 103(a) as being unpatentable over DE 19714645 (Becker) in view of Carlson 5,415,612.

Becker teaches an apparatus for coating comprising an applicator unit (15 or 16) for applying coating to a web (13) and roller (7 or 8) for guiding the web. The Becker roller including a core (2) having an outer surface; and a compressible covering (4) of an elastomeric material (see Figures 1-3). Becker teaches the elastomeric material layer has a plurality of pores or open-celled cavities uniformly distributed over the volume of the elastomeric layer. Becker teaches the pore or cavity size within the elastomeric material ranges between 0.05 to 1.0 mm, which reads on pores/cavities

Art Unit: 1734

size being substantially uniform in size. Becker fails to teach a bonding layer. However, it would have been obvious to modify the Becker roll in the coating apparatus to provide a bonding or adhesive layer between its core and covering to securely adhere the compressible covering to core since Carlson teaches using an adhesive material between the core and covering in order to secure different materials to one another to obviously prevent displacement of the layers over time in use of the coating roll. Thus, claim 1 and 17 are obvious over the combination of Becker and Carlson. With respect to claim 18, the same rejection applied to claim 1 is applied here. Further. Becker shows in Fig. 2, a roller (7) defining a press nip with the backing device (8). Becker roller (7) as shown is configured for receiving coating from an applicator unit. Thus, claim 18 is obvious over the above-cited references. With respect to claims 2 and 19, Becker teaches his roller is made of a rubber-like material (element 5) and an intermediate layer of a compressible covering (element 4). See Becker's Figures 1 and 2. With respect to claims 7 and 24, Becker teaches that the pores or cavities are air filled. Becker fails to teach the pores are open filled. Carlson teaches any preferred foam as the material in the compressible layer in accordance desired degree and ability to resist solvent (see column 3, lines 58-62 and column 5, lines 55-60). Therefore, it would have been obvious that the Becker cavities/pores in the compressible covering are open-celled in order to provide desired compressability. In any event, it would have been obvious to select an open-celled foam such as suggested Carlson as the material of construction of the Becker compressible covering to provide the desired characteristics as taught by Carlson et al. With respect to claims 3-4, 6, 8-15, 20-23

and 25-32, Becker shows the covering is monolithic. Becker teaches the thickness and hardness of the layers as well as the size of the cavities/pores set forth the above-cited claims (see pages 5-7 of the translation of Becker). With respect to claims 5, 16 and 39, although Becker fails to teach the foam is cross-linked on the core, Carlson et al teaches the foam material is poured and cured on the metal core and cross-linked using the disclosed foam composition (see Example 3 for disclosure of a foam using a cross-linking agent).

The rejection of claims 33-38 as set forth in Office action mailed June 2, 2004 has an obvious typographical error since Carlson 5,645,000 was inadvertently omitted in the rejection of these claims. Yet claims 33-38 depend on claim 18 which had been rejected over the combination of DE 19714645 (Becker) and Carlson 5,415,162.

Claims 33-38 are rejected under 35 U.S.C. 103(a) as being unpatentable over DE 19714645 (Becker) in view of Carlson 5,415,162 and Rantanen et al 5,650,010.

Becker and Carlson teach a coating apparatus as mentioned above. Becker fails to teach controlling operation parameters such as line force, surface or nip pressure and nip length in the claimed ranges. However, it was known in the art, at the time the invention was made to control operating parameters including nip pressure, linear load or force, and nip width or length (i.e., distance of the nip) in order to control coating weight on the web or the amount of material penetrated into the web as evidenced by Rantanen et al (see column 3, lines 52+ to column 4, lines 1-16). Therefore, given the teachings of Rantanen et al, it would have been obvious to one of ordinary skill in the art given the modifications of the Becker apparatus as discussed above to determine the

Art Unit: 1734

appropriate range for nip pressure, linear load or force, and nip width in accordance with the amount material desired to be penetrated into the web, with the most effective range for nip pressure, linear load or force, and nip width would be determined via routine experimentation and would only require routine skill in the art.

Applicant's arguments filed September 9, 2004 have been fully considered but they are not persuasive.

Applicant's argument that Becker and Carlson fail to teach the compressible coverage of an elastomeric material having a plurality of substantially uniformly distributed cavities, the cavities being of a substantially uniform size is found to be non-persuasive. Becker teaches the cavities within layer 4 are uniformly distributed through the layer. Becker teaches the size of the cavities varies from 0.05 millimeters to 1.0 mm. Becker fails to teach the cavities are of a substantially uniform size. However, one of ordinary skill in the art would have expected the cavities in the Becker layer 4 to be substantially uniform in size in order to be uniformly distributed through layer 4. Further, the determination of optimum range of pore size of the Becker roller would have been within purview of one skill in the art via routine experimentation since it has been held that where the general conditions of a claim are disclosed in the prior art, discovering the optimum or workable ranges involves only routine skill in the art. *In re Allen*, 105 USPQ 223.

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

Application/Control Number: 10/667,195

Art Unit: 1734

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication should be directed to Brenda A. Lamb at telephone number (571) 272-1231.

B.A. Lamb/dh December 7, 2004 endo adul Lamb

Page 6